

enzymatic, physical, chemical, or biochemical environmental changes triggered from intraoral microorganisms.

- 13 -

6. Dental material according to Claim 5, whereby the local and time-specific liberation of the substance and formation of the efficacy can be caused by the same or different enzymatic, physical, chemical, or biochemical environmental changes triggered by intraoral microorganisms.
7. Dental material according to one of the Claims 1 to 6, whereby the liberation of the substance occurs based on enzymatic separation.
8. Dental material according to one of the Claims 1 to 4, whereby the substance is hindered from diffusion from the dental material by being derivatized or incorporated covalently-bonded in the dental material, and is stored on the surface of the dental material in the area between the dentin or melt and dental material, and formation of the efficacy is based on a modification of the active ingredient which is caused by enzymatic, physical, chemical, or biochemical environmental changes triggered by intraoral microorganisms, whereby the substance is not liberated.
9. Dental material according to Claim 8, whereby the formation of the efficacy occurs in several steps by the same or different enzymatic, physical, chemical, or biochemical environment changes triggered by intraoral microorganisms.
10. Dental material according to Claim 8 to 9, whereby the substance remains hindered from diffusing from the dental material after developing the efficacy by being derivatized or incorporated covalently bonded in the dental material.

- 14 -

11. Dental material according to one of the Claims 1 to 10, whereby the substance contains taurolidine.
12. Dental material according to one of the Claims 1 to 11, containing
 - a) 0.01 – 10% of a substance, whose bacteriostatic and/or bactericidal efficacy is formed in the presence of intraoral microorganisms,
 - b) 3 - 80% of a polymerizable component
 - c) 0.01 – 25% of typical initiators and/or accelerators and/or retarding agents
 - d) 0 – 50% of typical additives
 - e) 0 – 90% of typical fillers
13. Dental material according to one of the Claims 1 to 12, containing
 - a) 0.1 – 5% of a substance, whose bacteriostatic and/or bactericidal efficacy is formed in the presence of intraoral microorganisms,

- b) 3 - 80% of a polymerizable component
 - c) 0.01 - 25% of typical initiators and/or accelerators and/or retarding agents
 - d) 0 - 50% of typical additives
 - e) 0 - 90% of typical fillers
14. Dental material according to one of the Claims 1 to 13, containing
- a) 0.1 - 3% of a substance, whose bacteriostatic and/or bactericidal efficacy is formed in the presence of intraoral microorganisms,
 - b) 3 - 80% of a polymerizable component
 - c) 0.01 - 25% of typical initiators and/or accelerators and/or retarding agents
 - d) 0 - 50% of typical additives
 - e) 0 - 90% of typical fillers

- 15 -

15. Use of a substance for the production of dental materials, whose bacteriostatic and/or bactericidal efficacy forms in the presence of intraoral microorganisms
16. Use of a substance, whose bacteriostatic and/or bactericidal efficacy forms in the presence of intraoral microorganisms, for the production of a dental molding material, a dental filling material, a glass ionomer cement, a temporary dental filling material, or a dental bonding material.

- 16 -

Summary

The invention concerns a dental material containing at least one substance whose bacteriostatic and/or bactericidal efficacy forms in the presence of intraoral microorganisms.

Further, the invention concerns the use of a substance whose bacteriostatic and/or bactericidal efficacy forms in the presence of intraoral microorganisms for the production of a dental material.